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(54) Ironing board cover

(57) Laminated ironing board covers are known to comprise a woven heat resistant outer layer and a foamed inner layer. The present invention provides an arrangement whereby the coefficient of elasticity of the foamed

layer is adapted to be reduced on application of heat and pressure, thereby providing means for taking out discontinuities in worn ironing board surfaces. The reduction of elasticity also enables the ready removal of worn ironing board covers so they may be periodically replaced.

GB 2 116 216 A

SPECIFICATION

Ironing board cover

The present invention relates to ironing board covers and to ironing boards to which they are attached.

It is well known that ironing board covers having a metallised heat resistant woven surface and a thermoplastic foamed backing have been used for a number of years. Laminates having a pressure or heat sensitive adhesive layer applied to one surface thereof are also known to be provided with a protective carrier sheet which can be removed prior to adhesion.

The Applicants wish to provide a self-adhesive ironing board cover, and initially attempted merely to apply an adhesive to a linear polyethylene foam and mount the same on a backing sheet. Unfortunately, in use it was found that the continued application of heat and pressure by an iron over a protracted period resulted in the cover becoming so adherent to the ironing board surface that it could not be removed when damaged or worn out without damaging the ironing board surface.

Further, where there were discontinuities in the ironing board surface, covers of the prior art and those just described proved insufficient to provide a smooth surface because, although the foam "took up" the discontinuities visually, this was not so when pressure was applied.

The present invention, therefore, seeks to provide an adherent laminate for application to an ironing board which can be readily removed, even after a protracted period of use which provides an excellent smooth ironing surface, even when the underlying board surface is roughened.

According to the present invention, therefore, there is provided a laminated ironing board cover comprising a woven, heat resistant outer layer and a foamed inner layer, characterised in that the co-efficient of elasticity of the foamed layer is adapted to be reduced on application of heat and pressure. The heat and pressure may be provided by the ordinary ironing operation after the laminate has been applied to the board.

The foamed layer may be adhesive in itself, or may be provided with a layer of a heat or pressure actuatable adhesive which, in use, bonds to the surface of the board. A varrier sheet is in any event provided, said carrier sheet being removed prior to application of the laminate.

In a preferred embodiment the foamed layer is formed of a cross-linkable thermoplastics material such as a polyolefin having a small amount of homogeneously dispersed heat actuatable cross linking agent therein. It will be appreciated that when such a foam is applied to an ironing board and heat and pressure is applied thereto by a flat iron, for example, the cross-linking system within the polyolefin will to some extent cross-link the foam thus tending to solidify the same over the length of the board. Thus, discontinuities in the board surface are first covered by the spongy foam, and then the foam is partially cross-linked to

make the same more rigid, thus to compensate for the roughened surface.

Suitable foamed materials for use in the invention include any which will fulfil the above parameters. However, polyolefin such as polyethylene having a small amount of cross-linking agent homogeneously dispersed therethrough, i.e.: dicumylperoxide are suitable. Alternatively, a copolymeric foamed material which hardens under the action of heat, and/or pressure may be used. When the foamed polymer is itself adhesive no further adhesive is, of course, necessary. However where the system is not adhesive, or more usually, not sufficiently adhesive, a layer of a pressure sensitive adhesive may be applied thereto. Pressure sensitive adhesives are well known in the art and any commercially available adhesive having a comparatively low bond strength, as between foam and metal or wood is suitable.

On example of the invention will now be described by way of illustration only in the following Example.

EXAMPLE 1

A fully shrunk woven cotton fabric was first sprayed with a silicon spray and subsequently metallised with aluminium particles in a known fashion. The so formed laminate was then passed from a roll to a lamination station at which a 2 mm layer of foamed Calogen 26 density non-tacky foam was applied and corrected for depth by means of a doctor blade.

A siliconized backing sheet carrying a water based adhesive, e.g.: PVA, as a backing sheet was applied to the so formed laminate to protect the same prior to use. In use the so formed laminate was aligned with the ironing board to which it was to be applied and a backing sheet was removed thus allowing the cover to adhere to the ironing surface. A hot flat iron was then passed over the cover to heat and apply pressure to the same, thus locating and fixing the cover on the board.

Long term trials revealed no relative movement of the cover relative to the board, and a fine smooth surface even where the surface of the board beneath was comparatively rough. It was also found that the cover was readily removable from the board after a considerable period of use.

Thus, although the ironing board cover was subjected to repeated applications of heat and pressure the foam did not deform and bond irrevocably to the surface of the board beneath as tends to happen when linear polyolefin foams are utilized.

The invention resides, therefore, in the ironing board cover laminate and in the assembly of the board and cover.

CLAIMS

1. A laminated ironing board cover comprising a woven heat resistant outer layer and a foamed inner layer, characterised in that the co-efficient of elasticity of the foamed layer is adapted to be reduced on application of heat and pressure.

2. A cover according to claim 1 wherein the formed layer is also self-adhesive to an ironing board surface in use.
3. A cover according to claim 1 wherein a layer of a heat and/or pressure actuatable adhesive overlies the foam and is adapted to bond the same to an ironing board surface in use.
4. A cover according to any one of claims 1 to 3 further including a carrier sheet, releasably adhered to the foamed or adhesive layers.
5. A cover according to any preceding claim wherein the formed layer is formed of a cross-linkable thermoplastics material.
6. A cover according to claim 5 wherein the thermoplastics material is a polyolefin and the foam also contains, prior to use, a small amount of homogeneously dispersed heat actuatable cross-linking agent.
7. A cover according to any one of claims 1 to 5, wherein the foamed layer is formed of a copolymeric foamed material which hardens under the action of heat and/or pressure.
8. A cover substantially as hereinbefore set forth with reference to the foregoing example.
9. An ironing board including a cover as claimed in any one preceding claim.